

ABSTRACT OF THE DISCLOSURE

An optical system for scanning, which can prevent the depth of focus from decreasing when magnification of the optical system is changed, especially when the magnification is increased. In this optical system, a zoom lens and a focus lens are arranged between a light source for emitting light beams and a scanning and focusing surface. In accordance with a desired resolution, an aperture is arranged at a position at which a far-field pattern is formed. When the magnification of the optical system is increased by the zoom lens, a luminous flux is widened, and a converging angle formed by the focus lens is also widened. However, since the aperture shields the luminous flux by an amount by which the converging angle has been widened, the converging angle is the same as that when an image is recorded at low resolution. Hence, the depth of focus can be maintained.

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